The Network Performance Evaluation of Linux-based Operating Systems will provide useful real-world data on the relative performance metrics between different Linux operating systems, and between IPv4 and IPv6.

* Given the shortage of IPv4 addresses, this project is important because it helps understand the pros and cons of switching to IPv6, and the differences with TCP vs. UDP.
* This data will allow Dr. Lutui to perform comparative analyses between historic and future data to find performance trends that may influence the adoption of IPv6 and its implementation on Linux-based operating systems.

The long-term impact should be a better understanding of IPv6’s performance compared to IPv4, alongside TCP/UDP data that supports the move to newer protocols such as QUIC. In theory, this should also have a positive impact on the network stack in Linux.